

In the claims:

The following list of claims replaces all previous lists of claims.

1. (currently amended) Device for exchange of moisture, between at least two counter-current gas flows (A, B), comprising a ~~generally-closed~~ chamber (1, 101) having an inlet (7, 107) and an outlet (8, 108) for a first gas flow (B), such that the first gas flow flows in a first direction from the inlet to the outlet inside the chamber; and at least one duct (2, 102), which extends inside the chamber, ~~generally-in~~ at least in a direction substantially parallel with the first direction, which duct (2, 102) is arranged to conduct a second fluid flow (A) in an opposite direction to the first direction and which duct (2, 102) comprises a duct wall material with high permeability to water, characterized by an inlet space for the gas flow B, which inlet space is arranged in the ~~central~~ chamber (1, 101), between the inlet (7, 107) and a first support and flow distributing member (9a, 109a) arranged inside the chamber (1, 101) between the inlet opening (7, 107) and ~~an~~ the outlet opening (8, 108), and having an extension in a plane which is non-parallel to the first direction, such that it extends essentially over the ~~essentially~~ entire area of said plane inside the chamber, which support and flow distributing member comprises at least one duct opening (10, 110) through which the at least one duct (2, 102) extends and a set (11a, 11c, 111) of flow distributing openings, and by means for uniform distribution of the gas inside the inlet space for providing a substantially ~~generally~~ parallel and uniform first fluid flow (B) inside the chamber.

2. (currently amended) Device according to claim 1, wherein said set (11a, 11c) of flow distributing openings is arranged such that ~~the~~ sizes of the openings (11a', 11a'', 11c', 11c'') vary over the area of the support and flow distributing member (9a, 9c).

3. (currently amended) Device according to claim 1, wherein said set of flow distributing openings is arranged such that a ~~the~~ number of openings (11a''', 11c''') per area varies over the area of the support and flow distributing member (9a, 9c).

4. (currently amended) Device according to ~~any of claim 1 to 3~~, wherein the chamber (1) is defined by a number of side walls (1a, 1b, 1c, 1d) and two end walls (3a, 3b), said inlet (7) being arranged in a first (1a) of said side walls and said outlet (8) being arranged in a second side wall (1b), which is opposite to the first side wall, and wherein a first (9a) support and flow distributing member (~~9a~~) is arranged closer to the inlet (7) than a second (9c) support and flow

distributing member, and which first support and flow distributing member comprises a first set (11a) of flow openings which is configured so that the accumulated size of the openings (11a', 11a'', 11a''') per area of the support and flow distributing member increases with the distance from the first side wall (1a).

5. (original) Device according to claim 4, wherein the second (9c) support and flow distributing member comprises a second set (11c) of openings, which is configured so that the accumulated size of the openings (11c', 11c'', 11c''') per area of the support and flow distributing member increases with the distance from the second side wall (1d).

6. (currently amended) Device according to claim 4 ~~or 5~~, wherein a third support and flow distributing member (9b) is arranged between the first (9a) and second (9c) support and flow distributing members, which third support and flow distributing member is configured for providing a minimum flow resistance against the first air flow (B), while still inducing turbulence to prevent the formation of laminar flow between the ducts (2).

7. (currently amended) Device according to ~~any of~~ claims 1-6, comprising a plurality of ducts (102), each comprising an end portion (102b'), which extends through the inlet space, between the first support and flow distributing member (109a) and an end wall (103b) of the central chamber (101), which end portion is tapering towards the end wall such that at least one free straight passage (120) for gas is formed between the end portions of the ducts, essentially perpendicular to the longitudinal direction of the end portions.

8. (original) Device according to claim 7, wherein the cross sectional area of the end portions (102b') is essentially constant over the length of the end portion.

9. (original) Device according to claim 8, wherein the cross sectional area of the end portion (102b') is essentially equal to the cross sectional area of the rest of the duct (102).

10. (currently amended) Device according to ~~any of~~ claims 7-9, wherein the end portions (102b') are formed of separate nozzles.

11. (currently amended) Device according to ~~any of~~ claims 1-10, comprising an outlet space for the gas flow B, which outlet space is arranged in the ~~central~~ chamber (1, 101), between the outlet (8, 108) and a second support and flow distributing member (9b, 109b) and by means for uniform distribution of the gas inside the outlet space for providing a generally parallel and uniform first fluid flow (B) inside the chamber.

12. (currently amended) Device according to ~~any of claim 1 to 11~~, wherein a wire spiral (2c) is arranged at the inside of the duct wall for inducing turbulence to the second fluid flow (A), inside the duct (2).

13. (currently amended) Device according to ~~any of claims 1-12~~, wherein a wire spiral is arranged at the outside of the duct wall for inducing turbulence to the first fluid flow (B) in the chamber (1) in the proximity of the duct wall.

14. (currently amended) Device according to ~~any of claim 1-13~~, wherein the duct wall material presents irregularities in the duct wall surface for inducing turbulence to the fluid flow (A, B) in proximity to the duct wall, on the inside and/or outside of the duct wall.

15. (currently amended) Device according to claim 1, wherein the device is provided in a stationary ~~Stationary arrangement for air treatment comprising a device according to any of claims 1-14 and~~ in a refrigeration apparatus.

16. (currently amended) Device according to claim 1, wherein the device is provided in a mobile ~~Mobile arrangement for air treatment comprising a device according to any of claims 1-14 and~~ in a refrigeration apparatus.

17. (currently amended) Device according to claim 1, wherein the device is provided in a stationary ~~Stationary arrangement for air treatment comprising a device according to any of claims 1-14 and~~ in a heat exchanger.

18. (currently amended) Device according to claim 1, wherein the device is provided in a mobile ~~Mobile arrangement for air treatment comprising a device according to any of claims 1-14 and~~ in a heat exchanger.